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Customer loyalty & face concerns

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Appendices

APPENDIX A1. MEASURES FOR STUDY 1A

Manipulation check—**product visibility** (Kramer et al., 2007)

- 1) Cell phones/mattresses are used in public.
 - 2) Other people know what cell phone/mattress I own.
 - 3) It is easy for other people to identify what cell phone/mattress I own.
 - 4) It is difficult to identify what cell phone/mattress I own.
 - 5) Cell phones/mattresses are used in private.
 - 6) Other people don't know what cell phone/mattress I own.
- (1 = *completely disagree*, 7 = *completely agree*)

Control variable—**product involvement** (Ratchford, 1987)

- 1) Buying a cell phone/mattress is a ____ decision.
(1=very unimportant, 7=very important)
- 2) Buying a cell phone/mattress is a decision that requires ____ thought. (1 = *little*, 7 = *a lot of*)
- 3) Buying a cell phone/mattress, you have ____ if you choose the wrong brand. (1 = *little to lose*, 7 = *a lot to lose*)

Price–face link

- 1) Relative to 89 Euro, do you think that 139 Euro for a cell phone/mattress can signal your status?
 - 2) Relative to 89 Euro, do you think that 139 Euro for a cell phone can enhance your self-image?
- (1 = *not at all*, 7 = *to a large extent*)

Dependent measure—**purchase intentions**

- 1) The likelihood that I would purchase cell phone/mattress A (139 Euro) is (1 = *very low*, 7 = *very high*)
- 2) The likelihood that I would purchase cell phone/mattress B (89 Euro) is (1 = *very low*, 7 = *very high*)
- 3) Please divide 100 points between the two choices. The more points you give to one choice, the more likely you will purchase that option. Please note that the sum of the points of the two choices should be 100 in total (e.g., A: 80, B: 20)! Cell phone/mattress A (139 Euro) ____points.
- 4) Cell phone/mattress B (89 Euro) ____points.
- 5) If I must choose one, the cell phone/mattress I will choose is: (A/B)

APPENDIX A2. MEASURES FOR STUDY 1B

Manipulation check—**product tangibility** (Carter & Gilovich, 2010)

Material products are those made with the primary intention of acquiring a material good, such as a new Gucci bag;

experiential purchases are those made with the primary intention of acquiring a life experience, such as a hike in the Himalayas. Please rate the extent to which a watch/musical is a material possession or an experience.

A watch/musical is _____ (*1 = definitely material, 4 = does not fit either category, 7 = definitely experiential*).

Control variable—**product familiarity** (Jung & Kellaris, 2004)

How familiar are you with the product category (i.e., watch)? (*1 = very unfamiliar, 7 = very familiar*)

Price–face link

1) Relative to 89 Euro/49 Euro, do you think that 139 Euro /79 Euro for a watch/musical can signal your status?

2) Relative to 89 Euro/49 Euro, do you think that 139 Euro /79 Euro for a watch/musical can enhance your self-image?

Dependent measure—purchase intentions

1) The likelihood that I would purchase[watch] watch/musical A (139 Euro/79 Euro) is (*1 = very low, 7 = very high*)

2) The likelihood that I would purchase[watch] watch/musical B (89 Euro/49 Euro) is (*1 = very low, 7 = very high*)

3) Please divide 100 points between the two choices. The more points you give to one choice, the more likely you will purchase that option. Please note that the sum of the points of the two choices should be 100 in total (e.g., A: 80, B: 20)! Watch/musical A (139 Euro/79 Euro) ____points.

4) Watch/musical B (89 Euro/49 Euro) ____points.

5) If I must choose one, the watch/musical I will choose is: (*A/B*)

APPENDIX A3. MEASURES FOR STUDY 2

Manipulation check—**social presence**

1) Who is the person you named?

(1 = *close friend*, 2 = *acquaintance*, 3 = *stranger*, 4 = *no one*)

2) How close is the relationship between you and the person you imagined? (1 = *very unclosed*, 7 = *very close*)

Price–face link

1) Relative to 6.9 Euro, do you think that 10.9 Euro for a dish can signal your status? (1 = *not at all*, 7 = *to a large extent*)

2) Relative to 6.9 Euro, do you think that 10.9 Euro for a dish can enhance your self-image? (1 = *not at all*, 7 = *to a large extent*)

Distribution–face link

1) Relative to the street vendor with an ice cream cart, do you think that ice cream specialty store can signal your status?

2) Relative to the street vendor with an ice cream cart, do you think that ice cream specialty store can signal your self-image?

(1 = *not at all*, 7 = *to a large extent*)

Product–face link

1) Relative to the AH [Carrefour] toothpaste, do you think that the name branded toothpaste can signal your social-status?

2) Relative to the AH [Carrefour] toothpaste, do you think that the name branded toothpaste can enhance your self-image?

(1 = *not at all*, 7 = *to a large extent*)

Promotion–face link

1) Relative to the dish that is on sale, do you think that the dish at a regular price can signal your social-status?

2) Relative to the dish that is on sale, do you think that the dish at a regular price can enhance your self-image?

(1 = *not at all*, 7 = *to a large extent*)

Dependent measure—**purchase intentions**

1) The likelihood that I would purchase dish A (10.9 Euro)/at specialty store/name-branded tooth paste/dish at a regular price is

2) The likelihood that I would purchase dish B (6.9 Euro)/at street vendor with an ice-cream cart/private label tooth paste/dish on sale is

(1 = *very low*, 7 = *very high*)

3) Please divide 100 points between the two choices. Dish A (10.9 Euro)/shop at specialty store/name-branded tooth paste/dish at a regular price____points.

4) Dish B (6.9 Euro)/at street vendor with an ice-cream cart/private label tooth paste/dish on sale____points.

5) If I must choose one, the dish I will choose is: (A/B)

APPENDIX B. GLOSSARY OF TERMS

Term	Definition
Logistic regression	<p>Logistic regression is well suited for studying the relation between a categorical or qualitative outcome variable and one or more predictor variables.</p> $Ln\left\{\frac{\pi}{1-\pi}\right\} = \log(odds) = \log it = \alpha + \beta x, \text{ where}$ <p>π = probability(Y = outcome of interest $X = x$) = $\frac{e^{\alpha+\beta x}}{1+e^{\alpha+\beta x}}$, such that π is the probability of the outcome of interest under variable Y; α is the intercept; and β is the slope parameter. In addition, X can be categorical or continuous, whereas Y is always categorical.</p>
Wald test and sig.	<p>A Wald test indicates the statistical significance of each coefficient (β) in the model, with the null hypothesis that the coefficient (parameter) is 0. The comparison of the calculated Wald statistic with the critical value of the chi-square distribution reveals whether the estimate is significant. If the calculated statistic is greater than a critical value (.05), the predictor meets statistical significance.</p>
EXP(β)	<p>The coefficients in a logistic regression appear in terms of the log odds, such that a coefficient equal to 1.695 implies that a one-unit change results in a 1.695-unit change in the log of the odds. We take the log by raising e to the power of the logistic coefficient. Thus we can derive EXP (β), the exponentiation of the coefficients, which is an odds ratio (OR) associated with a one-unit increase in the exposure. If OR = 1, exposure does not affect the odds of an outcome; if OR > 1, exposure increases the odds of the outcome; and if OR < 1, exposure is associated with lower odds of the outcome, assuming all other predictors remain constant.</p>
Nagelkerke R-square	<p>This value reveals prediction improvements achieved in a proposed model compared with a base (null) model. We use the log-likelihood for this calculation. This validation statistic can reach a maximum of 1.</p>

APPENDIX C. SCALES USED TO TEST THE TWO ASSUMPTIONS

Scales used to test concern for face assumption

Assumption 1: Collectivistic consumers have higher face concerns than individualistic consumers

CONCERN FOR FACE SCALE (CFF scale) (Cocroft & Ting-Toomey, 1994; White, Tynan, Galinsky, & Thompson, 2004)

- 1) I care about others' attitudes toward me.
- 2) I am concerned with my social status.
- 3) I hate being taken lightly.
- 4) I will be very angry if others are impolite to me.
- 5) I care about praise and criticism from others.
- 6) I will be very happy if I am treated with respect.
- 7) I am concerned with my self-image.
- 8) I will be very upset if I am criticized in public.

(1 = completely disagree, 7 = completely agree)

Scale used to test price–face link assumption

Assumption 2: The higher the price is, the more one has the face (adjusted version of the following original scales):

A. PRICE–FACE INDICATOR SCALE by Wang & Zhang (2011)

- 1) Using high-priced products, I convey a good impression to others.
- 2) Using high-priced products, I gain admiration from others.
- 3) Using high-priced products enhances my face in front of others.
- 4) Using high-priced products, I feel confident in front of others.
- 5) Using high-priced products gains others' recognition.
- 6) High-priced products match my social status.

(1 = completely disagree, 7 = completely agree)

B. PRICE–FACE INDICATOR SCALE adjusted from Li & Su (2007)

- 1) It is important that others like the high-priced products I buy.
- 2) It does not matter what friends think of different brands or products before I purchase a high-priced product.
- 3) Sometimes I buy a high-priced product because my friends do so.
- 4) High-priced product purchase is a good way to distinguish people from others.

- 5) What I consume should be consistent with my social status, and I like to buy high-priced products.
 - 6) Purchasing high-priced products can bring me a sense of prestige.
 - 7) It is important to have a dinner party in a high-priced restaurant even though I will pay a lot of money.
 - 8) When buying a gift for others, I always consider whether the price of the gift is high enough.
 - 9) If I buy a cheap gift for my friend, both my friend and I will feel we have lost face.
- (1 = *completely disagree*, 7 = *completely agree*)

APPENDIX D. SAMPLE PROCESS MACRO FOR SPSS

The SPSS PROCESS code below estimates the model depicted in Figure 4.5 and produces output used to construct Table 4.8. Taking Study 1b as an example, the variable names in the data that are used in the PROCESS command are DV3 (Y : Purchase choice), link (M: price–face link score), tangi (V: product tangibility), and IV (X: median split of concerns for face score). PROCESS model 14¹⁸ requires that the moderator in the second stage moderated mediation model be denoted as V in the syntax rather than W.

```
process vars=linktangi IV DV3/y=DV3/m=link/x=IV/v=tangi/
model=14/boot=1000/conf=90/.
```

¹⁸ Study 2a to 3d uses model 16 because the moderator social presence has 3 levels thus need to create two dummy moderators.

APPENDIX E. MODERATED MEDIATION RESULTS OF STUDY 1A: MEDIATING ROLE OF THE PRICE–FACE LINK

	Price–face link		Purchase likelihood(DV1)		Purchase proportions(DV2)		Purchase choice(DV3)	
	Coeff.	90% CI	Coeff.	90% CI	Coeff.	90% CI	Coeff.	90% CI
Face concerns (IV)	$\beta_1 \rightarrow .144$ (.327)	-.399,.688	$\beta_1' \rightarrow .516$ (.326)	-.026,1.058	$\beta_1' \rightarrow -4.690$ (5.135)	-13.228,3.849	$\beta_1' \rightarrow .069$ (.487)	-.731,.870
price–face link (Mediator)			$\beta_2 \rightarrow .355^*$ (.184)	.049,.660	$\beta_2 \rightarrow 2.315$ (2.896)	-2.501,7.130	$\beta_2 \rightarrow .247$ (.285)	-.221,.716
Product visibility (Moderator)			$\beta_3 \rightarrow .479$ (.852)	-.938,1.897	$\beta_3 \rightarrow 3.414$ (13.425)	-25.739,18.911	$\beta_3 \rightarrow -.782$ (1.371)	-3.036,1.472
price–face link \times Product visibility			$\beta_4 \rightarrow -.058$ (.243)	-.463,.347	$\beta_4 \rightarrow 2.960$ (3.834)	-3.416,9.337	$\beta_4 \rightarrow .344$ (.378)	-.278,.966
Constant	$\beta_0 \rightarrow 3.200^{***}$ (.231)	2.816,3.584	$\beta_0' \rightarrow 2.274^{***}$ (.516)	1.415,3.133	$\beta_0' \rightarrow 32.320^{***}$ (8.134)	18.793,45.847	$\beta_0' \rightarrow -1.864^{**}$ (.856)	-3.273,-.456
	R ² = .002 F(1,88) = .195, $p < .001$		R ² = .169 F(4,85) = 4.305, $p < .003$		R ² = .119 F(4,85) = 2.877, $p < .028$		Nagelkerke R ² = .175	

* $p < .10$ ** $p < .05$ *** $p < .01$

APPENDIX F. MODERATED MEDIATION RESULTS OF STUDY 2A: MEDIATING ROLE OF THE PRICE–FACE LINK

	Price–face link		Purchase likelihood (DV1)		Purchase proportions (DV2)		Purchase choice (DV3)	
	Coeff.	90% CI	Coeff.	90% CI	Coeff.	90% CI	Coeff.	90% CI
Face concerns (IV)	$\beta_1 \rightarrow -.066$ (.240)	-.462,.331	$\beta'_1 \rightarrow .652^{**}$ (.223)	.283,1.021	$\beta'_1 \rightarrow 8.449^{**}$ (2.997)	3.487,13.412	$\beta'_1 \rightarrow .491$ (.504)	-.338,1.320
Price–face link (Mediator)			$\beta_2 \rightarrow .575^{***}$ (.141)	.343,.808	$\beta_2 \rightarrow 6.342^{***}$ (1.889)	3.213,9.471	$\beta_2 \rightarrow .760^{**}$ (.320)	.234,1.286
Stranger (Moderator 1)			$\beta_3 \rightarrow .941$ (.634)	-.109,1.991	$\beta_3 \rightarrow 9.102$ (8.523)	-5.014,23.217	$\beta_3 \rightarrow .708$ (1.618)	-1.954,3.370
Acquaintance (Moderator 2)			$\beta'_3 \rightarrow .679$ (.589)	-.296,1.655	$\beta'_3 \rightarrow 1.211$ (7.918)	-11.902,14.323	$\beta'_3 \rightarrow -2.813$ (2.434)	-6.816,1.191
Price–face link \times Stranger			$\beta_4 \rightarrow -.307$ (.198)	-.635,.020	$\beta_4 \rightarrow -3.662$ (2.656)	-8.061, .737	$\beta_4 \rightarrow -.280$ (.430)	-.987,.428
Price–face link \times Acquaintance			$\beta'_4 \rightarrow -.291$ (.187)	-.602,.019	$\beta'_4 \rightarrow -.957$ (2.520)	-5.131,3.217	$\beta'_4 \rightarrow .484$ (.578)	-.468, 1.435
Constant	$\beta_0 \rightarrow 2.859^{***}$ (.179)	2.564,3.155	$\beta'_0 \rightarrow 1.886^{***}$ (.455)	1.133,2.640	$\beta'_0 \rightarrow 9.710$ (6.116)	-.419,19.839	$\beta'_0 \rightarrow -4.043^{***}$ (1.238)	-6.079,-2.007
	R ² = .001 F(1,143) = .075, $p < .785$		R ² = .203 F(6,137) = 5.817, $p < .001$		R ² = .187 F(6,137) = 5.265, $p < .001$		Nagelkerke R ² = .262	

 $*p < .10$

**** $p < .05$**

*** $p < .01$

APPENDIX G. MODERATED MEDIATION RESULTS OF STUDY 2B: MEDIATING ROLE OF THE DISTRIBUTION–FACE LINK

	Distribution–face link		Purchase likelihood (DV1)		Purchase proportions (DV2)		Purchase choice (DV3)	
	Coeff.	90% CI	Coeff.	90% CI	Coeff.	90% CI	Coeff.	90% CI
Face concerns (IV)	$\beta_1 \rightarrow .166$ (.260)	-.264,.595	$\beta_1' \rightarrow .602^{**}$ (.269)	.156,1.048	$\beta_1' \rightarrow 5.950$ (4.267)	-1.116,13.015	$\beta_1' \rightarrow .273$ (.354)	-.310,.855
Distribution–face link (Mediator)			$\beta_2 \rightarrow .195$ (.161)	-.073,.462	$\beta_2 \rightarrow 1.909$ (2.559)	-2.329,6.147	$\beta_2 \rightarrow .062$ (.208)	-.280,.404
Stranger (Moderator 1)			$\beta_3 \rightarrow -.608$ (.772)	-1.887,.671	$\beta_3 \rightarrow -9.005$ (12.243)	-29.281,11.271	$\beta_3 \rightarrow -1.009$ (1.016)	-2.681,.663
Acquaintance (Moderator 2)			$\beta_3' \rightarrow .109$ (.701)	-1.051,1.269	$\beta_3' \rightarrow 1.026$ (11.106)	-17.366,19.418	$\beta_3' \rightarrow .202$ (.898)	-1.275,1.680
Distribution–face link \times Stranger			$\beta_4 \rightarrow .290$ (.223)	-.078,.659	$\beta_4 \rightarrow 2.703$ (3.529)	-3.140,8.547	$\beta_4 \rightarrow .400$ (.306)	-.104,.904
Distribution–face link \times Acquaintance			$\beta_4' \rightarrow .005$ (.212)	-.346,.355	$\beta_4' \rightarrow -.218$ (3.355)	-5.774,5.339	$\beta_4' \rightarrow -.093$ (.272)	-.541,.354
Constant	$\beta_0 \rightarrow .595^{***}$ (.193)	2.570,3.211	$\beta_0' \rightarrow 3.620^{***}$ (.560)	2.693,4.548	$\beta_0' \rightarrow 45.577^{***}$ (8.877)	30.876,60.277	$\beta_0' \rightarrow .022$ (.717)	-1.158,1.201
	R ² = .003 F(1,142) = .407, $p < .524$		R ² = .131 F(6,137) = 3.444, $p < .003$		R ² = .048 F(6,137) = 1.163, $p < .330$		Nagelkerke R ² = .054	
	* $p < .10$		*** $p < .01$					

APPENDIX H. MODERATED MEDIATION RESULTS OF STUDY 2C: MEDIATING ROLE OF THE BRAND–FACE LINK

	Brand–face link		Purchase likelihood(DV1)		Purchase proportions(DV2)		Purchase choice (DV3)	
	Coeff.	90% CI	Coeff.	90% CI	Coeff.	90% CI	Coeff.	90% CI
Face concerns (IV)	$\beta_1 \rightarrow -.028$ (256)	-.452,.395	$\beta'_1 \rightarrow .476$ (.321)	-.057,1.008	$\beta'_1 \rightarrow 6.305$ (5.457)	-2.732,15.341	$\beta'_1 \rightarrow .235$ (.394)	-.413,.883
Brand–face link (Mediator)			$\beta_2 \rightarrow .106$ (.200)	-.225,.437	$\beta_2 \rightarrow 2.120$ (3.395)	-3.501,7.742	$\beta_2 \rightarrow .000$ (.242)	-.398,.397
Stranger (Moderator 1)			$\beta_3 \rightarrow -.799$ (.786)	-2.101,.504	$\beta_3 \rightarrow -3.022$ (13.345)	-25.122,19.077	$\beta_3 \rightarrow -.641$ (.942)	-2.189,.908
Acquaintance (Moderator 2)			$\beta'_3 \rightarrow .401$ (.759)	-.855,1.658	$\beta'_3 \rightarrow 8.535$ (12.881)	-12.797,29.867	$\beta'_3 \rightarrow -.165$ (.934)	-1.700,1.371
Brand–face link \times Stranger			$\beta_4 \rightarrow .085$ (.268)	-.358,.529	$\beta_4 \rightarrow -1.114$ (4.546)	-8.642, 6.414	$\beta_4 \rightarrow .252$ (.339)	-.306,.810
Brand–face link \times Acquaintance			$\beta'_4 \rightarrow -.131$ (.261)	-.563,.301	$\beta'_4 \rightarrow -2.850$ (4.425)	-10.178,4.478	$\beta'_4 \rightarrow .143$ (.332)	-.403,.689
Constant	$\beta_0 \rightarrow 2.516^{***}$ (.191)	2.200,2.831	$\beta'_0 \rightarrow 4.724$ (.577)	3.768,5.679	$\beta'_0 \rightarrow 56.515$ (9.794)	40.297,72.734	$\beta'_0 \rightarrow .887$ (.693)	-.252,2.026
	$R^2 = .000$ F(1,142) = .012, $p < .913$		$R^2 = .051$ F(6,137) = 1.216, $p < .302$		$R^2 = .025$ F(6,137) = .593, $p < .736$		Nagelkerke $R^2 = .023$	

* $p < .10$

** $p < .05$

*** $p < .01$

APPENDIX I. MODERATED MEDIATION RESULTS OF STUDY 2D: MEDIATING ROLE OF THE PROMOTION-FACE LINK

	Promotion–face link		Purchase likelihood (DV1)		Purchase proportions (DV2)		Purchase choice (DV3)	
	Coeff.	90% CI	Coeff.	90% CI	Coeff.	90% CI	Coeff.	90% CI
Face concerns	$\beta_1 \rightarrow -.214$ (.244)	-.618,190	$\beta'_1 \rightarrow .415^*$ (.233)	.029,.802	$\beta'_1 \rightarrow 2.350$ (2.724)	-2.161,6.860	$\beta'_1 \rightarrow -.090$ (.827)	-1.450,1.270
Promotion–face link (Mediator)			$\beta_2 \rightarrow .142$ (.138)	-.087,.371	$\beta_2 \rightarrow 4.994^{**}$ (1.613)	2.323,7.665	$\beta_2 \rightarrow 7.739$ (10.069)	-8.822,24.300
Stranger (Moderator 1)			$\beta_3 \rightarrow -.016$ (.588)	-.989,.958	$\beta_3 \rightarrow 2.798$ (6.866)	-8.572,14.169	$\beta_3 \rightarrow 47.086$ (64.802)	-59.503,153.676
Acquaintance (Moderator 2)			$\beta'_3 \rightarrow .612$ (.539)	-1.504,.280	$\beta'_3 \rightarrow -2.871$ (6.288)	-13.285, 7.542	$\beta'_3 \rightarrow 45.989$ (64.804)	-60.605,152.583
Promotion–face link \times Stranger			$\beta_4 \rightarrow .051$ (.203)	-.286,.387	$\beta_4 \rightarrow -2.253$ (2.374)	-6.184,1.679	$\beta_4 \rightarrow -7.447$ (10.075)	-24.020,9.125
Promotion–face link \times Acquaintance			$\beta'_4 \rightarrow .300$ (.187)	-.010,.610	$\beta'_4 \rightarrow .149$ (2.188)	-3.474,3.773	$\beta'_4 \rightarrow -7.247$ (10.076)	-23.820,9.325
Constant	$\beta_0 \rightarrow 2.570^{***}$ (.182)	2.269,2.871	$\beta'_0 \rightarrow 2.421^{***}$ (.426)	1.715,3.127	$\beta'_0 \rightarrow 10.365^{**}$ (4.976)	2.125,18.605	$\beta'_0 \rightarrow -50.126$ (64.788)	-156.693,56.441
	R ² = .005		R ² = .116		R ² = .159		Nagelkerke R ² = .270	
	F(1,142) = .771, $p < .381$		F(6,137) = 2.989, $p < .009$		F(6,137) = 4.328, $p < .000$			

* $p < .10$ ** $p < .05$ *** $p < .01$

